

Meeting Summary
Delaware Geographic Data Committee
9:30 a.m., August 18, 2000
Room 203, Cannon Lab,
College of Marine Studies, Lewes

Attendance List:*

David S. Hugg, III – Office of State Planning
Coordination
Tim Westbrook – New Castle County
Dennis Murphy – DNREC
Mike Townshend – DNREC
Bill Brierly – DNREC
Dick Sacher – University of Delaware
Tracy DeLiberty – University of Delaware
Reed MacMillan – Kent County
Debbie Pfeil – Town of Georgetown
David Beattie – City of Wilmington
Peter Owusu-Donkur – Kent County MPO
Joe Farrell – University of Delaware Sea Grant
Dan Blevins – WILMAPCO
Steve Lee – City of Dover
Jeff Bergstrom – City of New Castle
Lillian Wang – Delaware Geological Survey

Dave Gula – Delaware Transit Authority
Mark Nardi – USGS
David Dooly – Delaware Transit Corporation
Robert Jordan – Delaware Geological Survey
Dottie Morris – Sussex County Mapping
Tony DiGiuseppe – Sussex County Mapping
Dennis Norwood – Sussex County Mapping
Elayne Starkey – Public Safety
Rick West – OIS
Richard Harris – Statistical Analysis Center
Rick Rutter – DEDO
Ed Mcneeley – Delaware Department of State
Larry Newman – Spatial Systems Associates
Vincent Rucinski – DelDOT
Vern Svatos – University of Delaware
Mike Mahaffie – Office of State Planning
Coordination

Welcome and Introductions

Mike Mahaffie began the meeting at approximately 9:35 a.m. and gave a brief overview of the agenda and the handouts (Attached). There was a “round the room” set of introductions.

Information Updates

Dick Sacher reported that there have been no major changes to the Spatial Data Clearinghouse. Tracy DeLiberty reported that she is working now to collect and, where necessary, update metadata files for the data layers identified as part of the Delaware Spatial Data Framework. Mike Mahaffie made a brief mention of the Data Sharing Page established as part of the web site of the Delaware State Mapping Advisory Committee.

There was a short discussion of the newly released County Centerline files maintained by DelDOT. Data sets have been posted on a DelDOT web page (www.delDOT.net/GIS/centerline/) that include address ranges suitable for geocoding. These data sets are a product of DelDOT’s on-going effort to conflate their centerline and road segment data with the E-911 addressing data. Vince Rucinski, of DelDOT, asked for people to “test” the data sets and report problems to him. Two notes given at the DGDC meeting were a lack of address ranges within municipalities in the Sussex County data set and the lack of some non-state-maintained subdivision streets. Mike Mahaffie suggested an ad hoc beta-testing committee might meet sometime in the near future to discuss the data sets and their reactions to it with Vince.

It was also reported that the Public Safety/OIS project to establish a central geocoding function is on hold. The legislature has not appropriated funds for the project. The effort will continue.

* This list is based on the sign-in sheets filled in at the meeting. There may have been folks there who did not sign in. If you know of anyone, please let us know. Also, we may have mangled your name. If we did, please let us know. We’ll apologize profusely, and fix it.

Mike Mahaffie reported on the effort to find funding for a new round of digital aerial photos. A request for proposals (attached) has been sent and will likely be posted on the DGDC web site. Mike Mahaffie plans to meet, with State Planning Coordinator Dave Hugg, with the State Budget Director to talk about funding options. It was suggested that the project be open to the possibility of splitting the two tasks, aerial photography and land use/land cover interpretation. Mike Mahaffie note that he will need to assistance in reviewing proposals when they come in.

Steve Lee made a brief presentation on plans for the 2001 Conference of the Delaware/Maryland Chapter of the American Planning Association. He noted that GIS technology and spatial data are increasingly important to planners and that the planning committee for the conference is interested in presentations and demonstrations of GIS technology and uses.

Mike Mahaffie reported on recent activities by the Environmental Protection Agency, both nationally and at the regional level. EPA, like many other federal agencies, is becoming more involved in the use and sharing of spatial data. This has led to concerns in some states about possible duplication of effort in areas where the EPA initiatives may overlap with those of the USGS, the Federal Geographic Data Committee, and state-level GIS coordinating councils such as the DGDC.

Among the new activities at EPA are a new Office of Environmental Information, an Information Management Policy Work Group within EPA's Region III, a national geospatial data index, and an expansion of the EPA's Enviromapper (similar to the DNREC Environmental Navigator project). Mike reported that he, and other State GIS representatives acting through the National States Geographic Information Council (NSGIC) have been working with EPA and find them mostly interested in learning about existing activities and in avoiding duplication of effort. There is also some interest on the part of EPA in establishing some form of interstate, regional GIS consortium.

County Updates

Tim Westbrook reported on activities in New Castle County. The County's cadastral data set is "complete," in that it has been released and is now being regularly maintained. Tim reported some problems, but no major glitches. Among the data sets now available in the county are zoning maps, incorporated areas, school districts, the modified grid, traffic analysis zones, and others. The Data sets are not being released globally at this point, but are available to those within the GIUS community on request. Tim noted that the County will now need to work out some of its data dissemination policy questions.

Meanwhile, according to Tim, New Castle County GIS officials will work on enhancing the GIS portion of the Police Department data and their Wastewater Treatment functions. The Police Department data will be integrated with the state's Real-Time Crime system.

Reed MacMillan, of the Kent County Planning Department, reported on the County Government's reorganization, which has put the GIS function into the planning Department. He made a presentation (attached) on the County's efforts to integrate GIS data into the update of the County's comprehensive plan. Reed plans to use GIS workstations at a series of public workshops to present the County's GIS data and planning information to the public. He also plans to create an on-line GIS function to present the information and gather public feedback.

Reed noted that the year 2000 CAD update of the county's cadastral data set, last updated (as a GIS product) in 1997, has shown some inaccuracies, but that he is reviewing ways to correct the data set.

Dennis Norwood, of the Sussex Co. Mapping and Addressing Department, introduced some of his new staff and explained where his office is in developing a spatially referenced cadastral layer.

Dennis noted that the Sussex Cadastral layer is still a CAD product and is not yet fully spatially referenced. He noted that there was a GIS version of Sussex parcel lines completed in 1998 as part of the E-911

project, but that he does not plan to maintain that data set in that format. Dennis has questions about the practicality of maintaining and distributing such a data set.

Sussex's efforts have been slowed somewhat by a political decision to re-visit some of the work that had been completed in the Sussex Addressing project. Because many residents – those in existing named subdivisions – who already had city-style addresses, but addresses that weren't in conformity with the County's new addressing scheme, complained, it will be necessary to re-do some 60 percent of the addresses within the County.

On the positive side, efforts to update the county's tabular data have been more successful.

Delaware GIS 2000 Conference

After a short break, Mike Mahaffie gave an update on the planning efforts for the **Delaware GIS 2000 Conference**, planned for November 17, 2000. There is a web site (www.state.de.us/planning/gis2000). It contains vendor registration materials and promotional materials. Mike urged members of the Delaware GIS community to post links, with graphics from the web site, on their own sites.

Vern Svatos, who is coordinating the breakout sessions, explained that there will be three tracks established, based on the potential presentations that are submitted. He said that there has been one abstract submitted and that there have been a handful of "expressions of interest." Mike Mahaffie encouraged people to consider making presentations and to think about, and make suggestions for, what sort of presentations they would like to see.

Mike Townshend, who is coordinating the poster session, asked for submissions of un-mounted posters.

Mike Mahaffie noted that "Save This Date" cards had been sent out and that a notice had been sent to vendors who might be interested in displaying their wares at the Conference. A brochure will go out next. Mike asked anyone with ideas for names to be added to the Conference Mailing list e-mail them to him.

Maryland Technology Toolbox

Larry Newman, of Spatial Systems Associates, in Baltimore Maryland, made a presentation (attached) on the Maryland Technology Toolbox. The Toolbox is a project of the Maryland State Geographic Information Coordinating Council (MSGICC), which was formed in 1992. MSGICC differs from DGDC in that it includes only state agencies. County and Local governments in Maryland are represented by the Maryland Local Government Information Council (MLGIC), which works closely with MSGICC.

MSGICC was looking for a way to establish policies and procedures for GIS data development and distribution. The Toolbox provides a way for Maryland to coordinate that distribution.

Legal questions were answered with state legislation, in 1994, that allows State Agencies to recover the costs of data development and the costs of data distribution. The legislation allows agencies to set their own prices and negotiate their own licensing agreements. Each agency is responsible for maintaining its own data sets and for setting fees, establishing licensing and distributing the data. There are also private vendors who are able to distribute the full Toolbox data set, based on contractual agreements with each agency.

Among the standards in place behind the Toolbox are requirements that data sets be in the Maryland State Plane, in NAD83 meters, and that all data sets be compatible with ArcView.

Delaware Spatial Data Framework

Mike Mahaffie led a review Framework Draft approved by the State Mapping Advisory Committee (SMAC) in July (attached). This draft has been sent out to DGDC agency representatives and has been available on-line on the SMAC web site since shortly after the SMAC meeting in July.

Dennis Murphy made a motion to approve the Framework. Steve Lee seconded that motion and the DGDC approved it unanimously. The Framework will next be presented to the Cabinet Committee on State Planning Issues.

The meeting adjourned at approximately 11:50 a.m.

Draft Agenda
Delaware Geographic Data Committee
August 18, 2000
9:30 a.m.
Room 203, Cannon Lab,
College of Marine Studies, Lewes

1. Welcome and Introductions
2. Information Updates
 - a. Clearinghouse/Metadata/Data Sharing
 - b. OIS Geocoding Project
 - c. Next Round of Digital Aerial Photos
 - d. 2001 DE/MD APA Conference
 - e. EPA Activities/Regional Consortium Idea
3. County Updates
 - a. New Castle Co.
 - b. Kent Co.
 - c. Sussex Co.
4. Delaware GIS 2000 Conference
5. Maryland Technology Toolbox
6. Delaware Spatial Data Framework
 - a. Review Draft Approved by SMAC
 - b. Discussion
 - c. Vote
7. Wrap Up



STATE OF DELAWARE
EXECUTIVE DEPARTMENT
OFFICE OF
STATE PLANNING COORDINATION

**Request for Proposals
State of Delaware
Digital Orthophotography**

The Delaware Geographic Data Committee wishes to commission the production of a new set of digital aerial photographs of the State of Delaware, in or before the spring of 2002, to continue a series of aerial photographs taken in 1984, 1992, and 1997.

The photos should be at a scale and a resolution sufficient to allow their use by county and local governments in maintaining accurate cadastral maps. It is anticipated that the provision of such photography will be considered state assistance to local governments in maintaining these maps and that the resulting cadastral data sets will be freely available to state, county and municipal government agencies.

The Committee also wishes to commission photo-interpretation of the photography to produce a land use/land cover data set that can be compared to previous land use and land cover data sets.

Interested vendors should submit detailed proposals, including full cost estimates, to the Delaware Geographic Data Committee, at the address below, by September 22, 2000.

Michael B. Mahaffie
Delaware Geographic Data Committee
C/O The Delaware Office of State Planning Coordination
Third Floor, Suite 7
Thomas Collins Building
540 S. DuPont Highway
Dover, DE 19901

The Delaware Geographic Data Committee, which includes representatives from state, county and local governments as well as academia and the private sector, will use these estimates to propose a budget for the project through the Delaware State Budget Office. The Committee will choose a vendor for the project if, and after, an appropriation for the project is approved.

Further information on the proposed project is below. You may also contact Mr. Mahaffie, at (302) 739-3090, or by e-mail at mmahaffie@state.de.us, for further information.

Background

In 1984, 1992, and 1997, different state government agencies, acting alone or in small groups, funded projects to produce aerial photography of the state. These projects produced full sets of photographs of the state, divided into sections (“quarter quads”) that approximated a quarter of each of the United States Geological Survey (USGS) quadrangles that cover Delaware.

These photos have been used to support a wide range of state activities, including transportation planning, land use planning and research, land preservation, environmental protection, development of spatial data sets for use with Geographic Information System (GIS) software, and traditional mapping. These photos have also been used to help in the development of cadastral mapping (parcel mapping) and other projects, by local jurisdictions.

It is generally agreed among the Delaware GIS community – as represented by the Delaware Geographic Data Committee (DGDC) and the State Mapping Advisory Committee (SMAC) – that Delaware should establish funding for, and a process to ensure the management and wide distribution of, a regularly updated set of aerial photographs or their equivalent. The next set of photos should be taken no later than the spring of 2002, to maintain the five-year cycle begun by the 1992 and 1997 data sets. Most data users agree that it would be preferable to eventually establish a three-year cycle.

Specifications

Product – The end result of the project shall be a set of geo-registered digital orthophoto files (Geo-TIFF’s or their equivalent). These files shall be presented in a format that fits logically within, or can be matched to, the USGS quadrangle system.

Photography – The data gathered must be collected in such a way that the clearest possible picture of ground conditions is shown. For example, photography shall be in a “leaf-off” period, to ensure a clear picture, uninhibited by vegetative canopy.

Distribution – The project proposed shall result in both paper and digital photography that is capable of being fully and freely available to state agencies and to county and local governments and fully publicly accessible. Proposals should contain estimates of the costs of duplication of the data set for distribution among state agencies and others.

Projection – The product shall be geo-referenced within the Delaware State Plane Coordinate System (NAD83 Datum), as outlined in Title 6, Chapter 55, §5502(b), of the Delaware State Code.

Scale -- As stated above, the photos shall be at a scale and a resolution sufficient to allow their use by county and local governments in maintaining accurate cadastral maps. This should be at least at a scale of 1:2400 in rural and less heavily developed portions of the state, and 1:1200 in urban areas and incorporated places.

Land Use/Land Cover – Photo-interpretation should be a part of the proposal. The photography should be interpreted to produce a data set that can be compared to previous land use and land cover data sets which used the Anderson et al land use/land cover scheme.

Color – Proposals should include separate pricing for color and black and white photography.

Metadata – The final product shall include fully FGDC-compliant metadata files.



Vendors Wanted!

The Delaware GIS community is proud to announce that it will hold at Statewide GIS Conference in November. The **Delaware GIS 2000 Conference** will be held at the Dover Sheraton Inn and Conference Center on Friday, November 17, 2000 from 9:00 a.m. to 3:30 p.m.

The Conference is sponsored by the Delaware Geographic Data Committee; The University of Delaware's Institute for Public Administration, and the Delaware Office of State Planning Coordination.

GIS professionals –as well as many of the policy makers that employ them– will be on hand to discuss the current and future uses of Geographic Information Systems throughout Delaware.

Delaware State Treasurer Jack Markell, a leader in the state's e-government initiatives, will present the keynote address.

Vendors interested in meeting with this group are welcome to purchase Vendor Registrations for \$300, which will ensure display space and two complimentary registrations. Display space will consist of standard-sized display booths in the West Atrium of the Conference Center, located between the main conference room and the conference breakout rooms.

To register as a Vendor, contact Gloria Wilkins, of the Institute for Public Administration, at (302) 831-8971. The registration deadline for Vendors is Friday, November 10, 2000.

For more information on the **Delaware GIS 2000 Conference**, visit the conference web site at www.state.de.us/planning/gis2000/.

The Delaware GIS2000
Conference Planning
Committee

C/O The Delaware Office
of State Planning
Coordination
Third Floor, Suite 7
Thomas Collins Building
540 S. DuPont Highway
Dover, DE 19901

Contact: Mike Mahaffie
(302) 739-3090
mmahaffie@state.de.us



Delaware GIS 2000 Vendor Registration Form

We invite you to exhibit your GIS applications and solutions at the November 17, **Delaware GIS 2000 Conference**. GIS users from across Delaware will be there; we anticipate attendance of approximately 175 persons. Vendor Registration is \$300 and includes two (2) registrations for the Conference. Please make payment in a check payable to the University of Delaware and submit it with the registration form.

Please provide the following information:

Name/Title (1): _____

Name/Title (2): _____

Firm: _____

Address: _____

Phone No.: _____ Fax No.: _____

E-Mail: _____

Type of material to be exhibited: _____

Special Needs: _____

Please complete and return this form as soon as possible — No later than November 10, 2000. We will call or write you with further information. If you have any questions, please contact Mike Mahaffie at (302) 739-3090 or mmahaffie@state.de.us or Alex Settles at 831-1699 or asettles@udel.edu. To contact the Institute call Gloria Wilkins at (302) 831-8971.

Please forward your registration and payment to:

Gloria Wilkins
Institute for Public Administration
College of Human Resources, Education and Public Policy
University of Delaware
180 Graham Hall
Newark, DE 19716 - 7380
(302) 831-3488 (fax)

Spatial Systems

Maryland's Technology Toolbox

History of MSGIC

- **Maryland State Geographic Information Coordinating Committee**
- **Representatives from Maryland Agencies**
- **Formed in 1992**
- **Strategic Plan in 1995**
- **Established “Toolbox” in 1995**

Primary Participating Agencies

- Maryland Department of Planning
- Maryland Department of Natural Resources
- Maryland State Highway Administration
- Maryland Department of Housing and Community Development

Additional Active GIS Agencies

- **Maryland Department of Agriculture**
- **Maryland Department of the Environment**
- **Maryland Department of Assessments and Taxation**

Data Distribution

- State legislation allowed agencies to establish data distribution costs and policies
- Each participating agency established a primary dataset and a “toolbox” dataset
- Each participating agency developed pricing, licenses, and distribution channel

Data Standardization

- **MSGIC Standards**
 - **Maryland State Plane**
 - **NAD83**
 - **Meters**
 - **ArcView-compatible**

Data Contributors

- **Maryland Department of Planning**
- **Maryland Department of Natural Resources**
- **Maryland State Highway Administration**
- **Maryland Department of Housing and Community Development**

Maryland Department of Planning

- **Maryland PropertyView**
 - Property Maps
 - Assessment Data
 - Road Files
 - 30-meter Landsat Imagery
 - Smart Growth Primary Funding Areas
 - Land Use/Land Cover
 - Census tracts and blockgroups
 - Zip Codes
 - Legislative and Congressional Boundaries

Maryland Department of Natural Resources

- Digital Orthophotography
- Sensitive Species Project Review Areas
- NWI Wetlands
- DNR Wetlands
- Wetlands of Special State Concern
- Watershed boundaries
- Critical Area boundary
- Submerged Aquatic Vegetation
- Changes in Shoreline
- Floodplains

State Highway Administration

- **County Grid Maps**
- **County Maps**

Department of Housing and Community Development

- **USGS 7.5' Quadrangle Maps**
- **Historic Sites**
- **National Register Sites**
- **Historic Preservation Easements**
- **Known Archeological Site Grids**

Licensing Issues

- Annual fee vs. one time perpetual license
- Number of users
- Rights to distribute

Distribution/Support Issues

- **Agency vs. Dealer**
 - Value added vs. production only
 - Discount schedule – based on client
 - Royalty Payments
 - Training
 - Call response
 - Marketing/Demonstration
 - Updating/Maintenance

Questions

Demonstration

The Delaware Spatial Data Framework

**Developed by the State Mapping Advisory Committee
and the Delaware Geographic Data Committee**

Introduction

The Delaware Spatial Data Framework provides the basic data “skeleton” needed by users of Geographic Information Systems (GIS) throughout Delaware. The data layers that make up the Framework are the bones on which state agencies, local and county governments, academic GIS users, and the private sector can build their own GIS data.

The Framework is being assembled by the State Mapping Advisory Committee (SMAC) and the Delaware Geographic Data Committee (DGDC) as part of an over-all effort to increase data sharing. Given a carefully assembled Framework on which to base their work, GIS users will be better able to create new data sets that can fit together with, and be used in conjunction with, other data sets.

Data that can be analyzed in a spatial context – also known as geographically referenced data – is essential to planning and operations in many levels of government and in the private sector. These data sets can be expensive – in time, money, and other ways – to produce. When different levels of government, or different agencies, duplicate the creation of the same sets of data, time and money are wasted. A functioning, shared Framework approach will save time and money for all data users.

The Main Framework Layers

A joint committee made up of representatives from the SMAC and the DGDC developed the list of Framework layers. There are nine main categories, based in part on the Framework layers identified at the national level by the Federal Geographic Data Committee. They are:

1. Transportation
2. Water (Hydrography)
3. Elevation (Hypsography)
4. Aerial Photos (Orthoimagery)
5. Governmental Units (Boundaries)
6. Land Use and Land Cover
7. Cadastral (Tax Map/Parcel Data)
8. Geographic Names
9. Geodetic Control Points

How Framework Works

There is no central GIS “authority” in Delaware. Instead, a network of GIS users at all levels of government works cooperatively to develop and share data. In the detailed list of Framework layers that follows, agencies and/or groups are identified that already maintain specific Framework data sets, or have been identified as logical sources and or maintainers of each data set.

Framework data layers are intended to be made available to the user community as freely and as easily as possible. Though distribution will vary for different data sets, the SMAC and the DGDC intend to work to provide on-line access to these data sets wherever possible.

The Framework List

What follows is a list of the basic Framework layers identified under each of the main categories. This is not a list of all of the data sets that are possible in each of these categories; these are simply the most basic (framework) data sets, providing the base on which other data sets can be analyzed.

Transportation -- Road Network (T1)

An accurate road centerline data set that supports location or reference needs. Location may be in terms of address, route and milepoint, intersection, place, or other common means. Road identifiers and other attribute data will be in accordance with statewide standards and will serve as a structure to reference transportation and public safety data such as: the DelDOT Road Inventory; crime and incident statistics; road condition databases; transit property and ridership data; utility records; and data referenced by address.

Source: DelDOT Centerline File

Scale: 1:12,000

Maintenance: DelDOT

Update: As Needed

Future Needs:

Transportation -- Railroads (T2)

A detailed, large-scale data set of the freight and commuter railroads in the State.

Source: DelDOT Rail Data Set

Scale: 1:12,000

Maintenance: DelDOT

Update: As Needed

Future Needs:

Hydrography -- Water Bodies/ Waterways (H1)

An accurate and detailed data set showing all water bodies and waterways and designation of their classifications. Identifiers are standard and the representation of waterways supports linear referencing (e.g. river/milepoint) and common methods of specifying location with respect to water bodies in Delaware. The hydrography structure would be able to reference Delaware data sets concerning water bodies and facilities such as discharges, public water supply surface intakes, dams, water quality monitoring, and stream gauge data.

Source: USGS DLG files.

Scale: 1:24,000

Maintenance: Delaware Geographic Survey/USGS

Update: Yearly or as needed

Future Needs: Establish maintenance procedure with funding. Better integration with Centerline file transportation product T1 and hypsography product E1. Incorporate more detailed wetland data. Incorporate more detailed stream "reach" data.

Hydrography -- Watersheds (H2)

An accurate and detailed data set showing all drainage basin and sub-basin boundaries. Attribute data should include all basin and sub-basin names and code numbers.

Source: DNREC

Scale: 1:24,000

Maintenance: DNREC Watershed Assessment Section

Update: As Needed

Future Needs:

Hypsography (Elevation Data) -- Elevation (Contour) (E1)

A data set of the elevation contour lines from the U.S. Geological Survey 7.5-minute topographic maps at 1:24,000 scale.

Source: USGS DLG files.

Maintenance: Delaware Geographic Survey/USGS

Scale: 1:24,000

Update: Yearly or as needed.

Future Needs: Establish maintenance procedure with funding. Better integration with Centerline file transportation product T1.

Hypsography (Elevation Data) -- Elevation (Grid) (E2)

A regularly spaced grid of elevation values or elevation contours spatially referencing elevation above or below a datum surface. Elevations of land surfaces as well as depths below water surfaces are included. Most relevant as used for watershed delineation and modeling, and study of drainage and its effects.

Source: Available as 30 and 10 meter DEMs from University of Delaware Spatial Analysis Lab

Maintenance: No maintenance necessary.

Scale: 1:24,000

Update: Dependant on Data Item E1 above. When new vectors are collected, new DEMs can be generated.

Future Needs:

Orthoimagery -- Detailed Aerial Photos (O1)

Detailed corrected digital imagery at various scales that can be used to interpret and compile many geographic features, and that can also serve as a backdrop to other analysis and/or mapping. Layers are composed of accurately positioned pixels. Orthophotography, satellite imagery, and a variety of remote sensing are in this category.

Source: Not available yet

Maintenance: Delaware Office of State Planning Coordination

Scale: 1:1,200 & 1:2,400

Update: 3-5 year cycle

Future Needs: Establish maintenance procedure with funding.

Orthoimagery -- Aerial Photos (O2)

Corrected digital imagery from 1992 and 1997 at various scales that can be used to interpret and compile many geographic features, and that can also serve as a backdrop to other analysis and/or mapping. Layers are composed of accurately positioned pixels. Orthophotography, satellite imagery, and a variety of remote sensing are in this category.

Source: DelDOT 1992 and 1997

Maintenance: No maintenance necessary.

Scale: 1:12,000

Update: None

Future Needs:

Government Units (Boundaries)* -- State and County boundaries (G1)

An accurate line and/or polygon representation of the boundaries of the State of Delaware and of the Counties of New Castle, Kent, and Sussex.

Source: USGS DLG files.

Maintenance: Delaware Geographic Survey/USGS

Scale: 1:24,000

Update: As needed

Future Needs:

Government Units (Boundaries)* -- Incorporated areas (G2)

A non-regulatory data set representing municipal boundaries. This is not intended to be the "legal" delineation of boundaries, that can be found in text in town charters.

Source: Delaware Office of State Planning Coordination

Maintenance: Delaware Office of State Planning Coordination

Scale: 1:12,000

Update: As needed

Future Needs: Refine update procedure for DLG files.

Government Units (Boundaries)* -- Election Districts (G3)

A data set showing the extent of the various districts used to define which polling place a voter votes in. These can be combined to form a variety of geographies relating to representative, senatorial, councilmatic, and other districts.

Source: Currently Unavailable

Maintenance: Div. of Elections with input from US Census Bureau

Scale: 1:24,000

Update: 10 Years

Future Needs: Establish maintenance procedure with funding.

Government Units (Boundaries)* -- Census Geography (G4)

The blocks, block groups, census tracts, census county divisions and other geography used in the aggregation of decennial census data.

Source: US Census Bureau

Maintenance: US Census Bureau, with input from Delaware State Data Center (DEDO)

Scale: 1:100,000

Update: 5 or 10 year cycle

Future Needs: Incorporate with larger-scale data (1:24,000 and 1:12,000)

* A number of layers that include standard identification and official descriptions.

Land Use/Land Cover -- Land Use/Land Cover (L1)

A large-scale landcover data set used for natural resource protection and identification. Rather than based on property boundaries, more geared to land cover with categories such as forested lands, floodplains, steep slopes, residential, commercial, manufacturing, agriculture, barren lands, utilities, etc.

Source: Delaware Office of State Planning
Coordination
Scale: 1:12,000

Maintenance: Delaware Office of State
Planning Coordination
Update: 3-5 year cycle

Future Needs: Establish maintenance procedure with funding. Closely tied to data item O2 above.

Cadastral -- Cadastral (C1)

Digital polygon data set of parcels with basic attribute data and identification information for all three counties and for major municipalities for the reference of land use data (past, present, and projected), the location of addresses, the demands on resources, and the ownership and value of property. The digital parcel map serves as a base in a range of applications including emergency management, corridor analysis, market analysis, environmental protection, population and employment projections, and development tracking; With associated text and graphics also serves as a high accuracy cartographic base.

Source: Available from Kent and New
Castle Counties. Under development by
Sussex County and some Local
Governments.

Maintenance: Counties/Local
Governments

Scale: 1:600, 1:1,200, 1:2,400, 1:4,800

Update: Continuous

Future Needs: Move from un-registered cartographic data set to spatial GIS data set in Sussex County. Arrangements need to be made for distribution support for the counties. Cadastral standards (being worked on). . Closely tied to data item O2 above.

Geographic Names and Information System -- GNIS (N1)

The GNIS is our Nation's official repository of domestic geographic names information. This data set comprises a comprehensive list of cultural geographic features in Delaware. The Federally recognized name of each feature described in the data base is identified, and references are made to a feature's location by State, county, and geographic coordinates.

Source: USGS

Maintenance: Delaware Geographic
Survey/USGS

Scale: 1:24,000

Update: As Needed

Future Needs: Establish maintenance procedure with funding

Geodetic Control -- Geodetic Control (GEO1)

Geodetic control data set providing the means for determining locations of features referenced to common, local and nationally-used horizontal and vertical coordinate system. The specification of control stations and survey monuments whose location can be used as a basis for obtaining location or other points.

Source: National Geodetic Survey HARN *Maintenance:* National Geodetic Survey Network

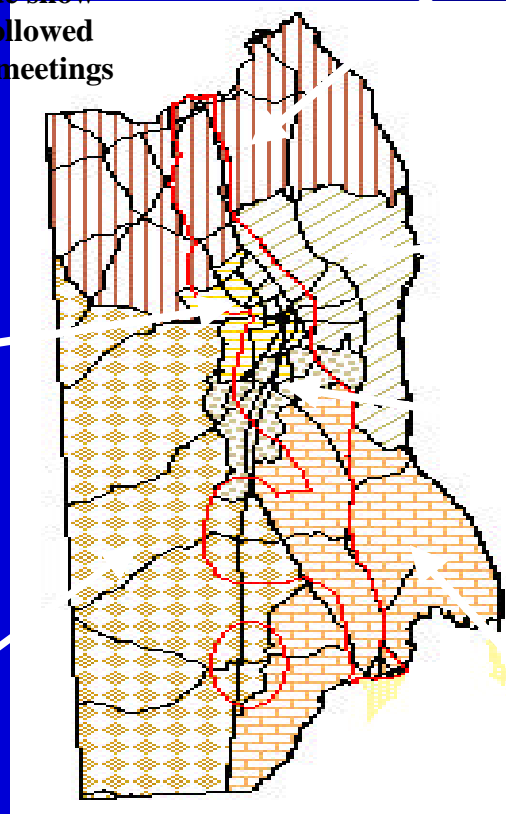
Scale: N/A

Update: As needed

Future Needs: Establish maintenance procedure with funding

Kent County Comprehensive Plan Update

Kent County invites and encourages its citizens to participate in the review of the current Kent County Comprehensive Plan Update. A series of workshops will be held throughout the County in each Levy Court District. Each workshop will provide information regarding subdivisions, environmental conditions, farmland preservation, sewer & water, transportation issues, planning & zoning issues, historic preservation, and growth issues. The information gathered will be utilized by the Department of Planning Services in the development of the 2001 Kent County Comprehensive Plan Update. This is an opportunity for citizens to help shape the future of Kent County. The agenda includes a slide show with questionnaire beginning at 6:30 p.m. sharp, followed by a map exercise and information exchange. The meetings will conclude at 8:30 p.m. For more information, see our Web Page at www.co.kent.de.us or call us at (302) 744-2471.



LC #2 Kent County Building, September 6th
(414 Federal St., Dover)

LC #2 U of Del Pardee Center, September 27th
(69 Transportation Circle, Dover)

LC #6 Harrington Fire Hall, November 8th
(20 Clark St., Harrington)

LC #6 Marydel Fire Hall, November 20th
(110 Firehouse Lane, Marydel)

LC #1 Smyrna Fire Hall, September 20th

(Commerce St., Smyrna)

LC #1 Clayton Fire Hall, October 16th

(1050 Railroad Ave., Clayton)

Dover Parks & Rec Bldg, OCT 26th & NOV 30th
(1210 White Oak Road, Dover)

LC #5 Dept. of Agriculture, October 4th & 30th
(23205 S. DuPont Hwy., Camden)

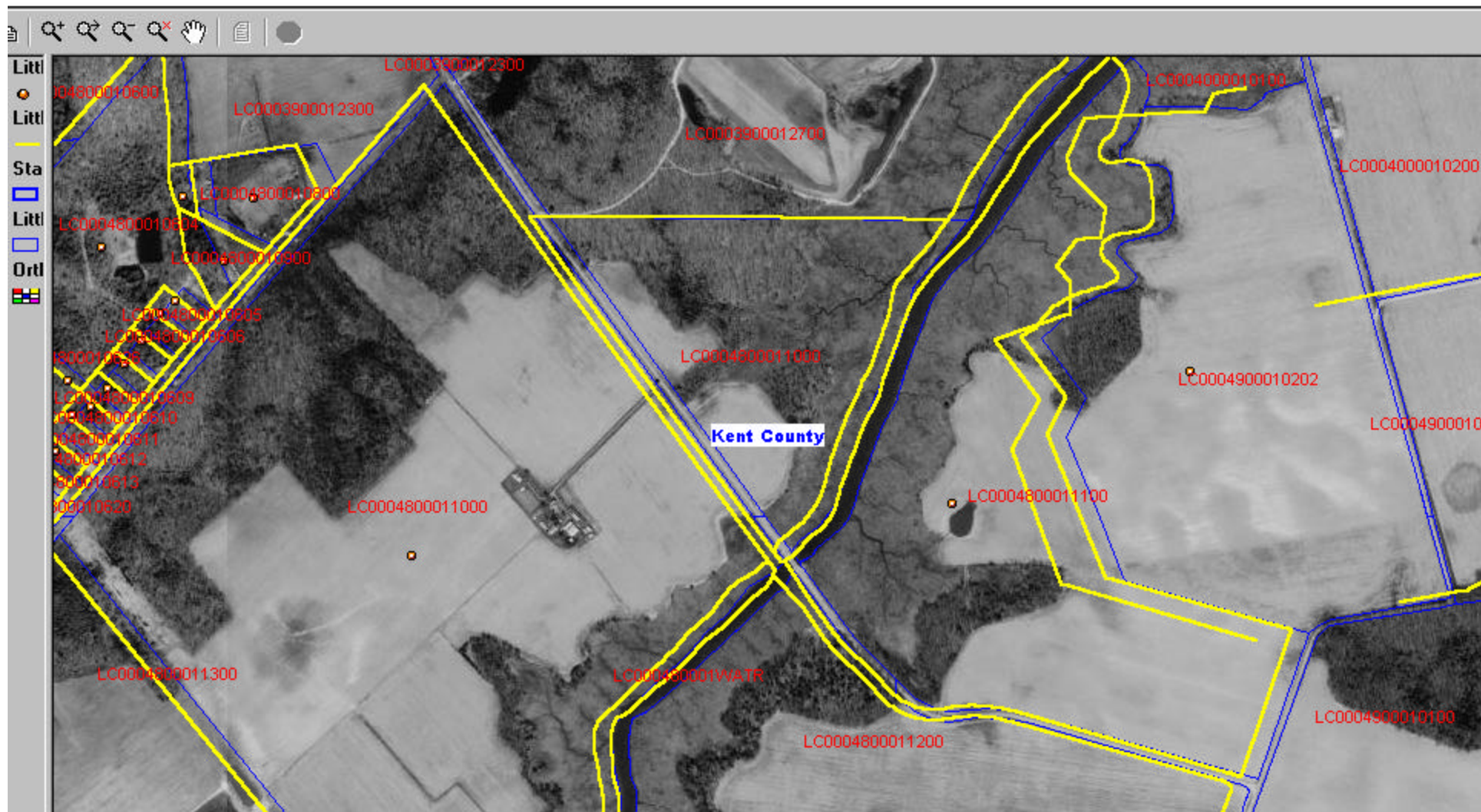
LC #4 Carlisle Fire Hall, September 18th
(615 N.W. Front St., Milford)

LC #4 Frederica Fire Hall, October 18th
(Frederica Road, Frederica)

Arrows show the Levy Court District, not meeting location.

Comprehensive Plan Analytical Information Internet Site Plan of action

- **Need to accomplish two actions:**
 - (1) Complete the Year 2000 Parcel Map**
 - (2) Create the Comp Plan Internet Web Page that would allow analysis for:**
 - **Parcel information**
 - **Allow citizens access to view data for free**
 - **Allow State and Federal agencies to view data**
 - **Developed by consultant but information management and updated by Kent County**



Action #2 Collect Web Page Data Continued (from various databases)

NETWORK FILES

AICUZ

AGLAND Preservation

Flood Plain

Streams

Wetlands

Access Management

Corridor Preservation

Levy Court District

Fire Districts

Growth Overlay

Sewer Lines & Districts

Communication Towers

Census Tracts/Modified Grids

Zoning Map

Comprehensive Plan Map

Coastal Zone

Historic Preservation

Subdivision

CAMA System

Acres

Topography

Location

Dwelling Type

Date Erected

Type of Accessory

Structure

Quantity of Accessory

Structure

Subdivision

AS/400 Land Management

Parcel I.D.

Location/Property/Address

Land Use Code/Zoning

Land Use Applications

Permit Number

Permit Date

Notes Code

Action #2 Comprehensive Plan Web Page

Data Requirements

(How it will work)

```
graph LR; A[Kent County data on various drives and software/systems:  
*ARCVIEW (Network)  
*CAD (Network)  
*Assessment data (CAMA)  
*Tax info (AS/400)  
*Land Use & Inspections (AS/400 Land Management)] --> B[Data copied as ASCII databases on CD-ROM, all data using MAP ID as common reference, thus creating standard/common link for all data]; B --> C[Databases attached to Web Page Map using MAP ID as common reference. Stored on separate server.]; C --> D[Users point or query the parcel on Web Page and view data attached];
```

Data copied as ASCII databases on CD-ROM, all data using MAP ID as common reference, thus creating standard/common link for all data

Kent County data on various drives and software/systems:

- *ARCVIEW (Network)**
- *CAD (Network)**
- *Assessment data (CAMA)**
- *Tax info (AS/400)**
- *Land Use & Inspections (AS/400 Land Management)**

Databases attached to Web Page Map using MAP ID as common reference. Stored on separate server.

Users point or query the parcel on Web Page and view data attached